



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,828	12/08/2003	Yin-Chun Huang	4425-341	9284
43831	7590	09/21/2005	EXAMINER	
BERKELEY LAW & TECHNOLOGY GROUP 1700NW 167TH PLACE SUITE 240 BEAVERTON, OR 97006			TSO, LAURA K	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/728,828	HUANG ET AL.
	Examiner laura tso	Art Unit 2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1 and 4-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) 1 and 4 is/are allowed.
- 6) Claim(s) 5,7-11 and 13-17 is/are rejected.
- 7) Claim(s) 6 and 12 is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 December 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ . | 6) <input type="checkbox"/> Other: ____ . |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5, 7, 8, 10, 11, 13-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwabara et al. (6,508,564) in view of Gianotti et al. (6,481,131).

Kuwabara discloses a backlight system to be used to illuminate a liquid crystal panel [column 1, line 11] comprising a light guide [1] having an incident surface [1a], a backside [11] and a light exiting surface [12], the backside has a pattern for light scattering formed thereon [column 5, lines 59-60] and a reflective sheet [5], the light exiting surface positioned adjacent to the LCD panel [column 5, lines 58+], and an illumination module comprising a printed circuit board [21] having light emitting elements [2]. A diffusion sheet [3] is positioned between the light exiting surface and the LED panel. Kuwabara does not disclose the specific limitations of the illumination module.

Gianotti, in a similar device, discloses a lighting system comprising a light guide [20] having a light incident surface, a backside having a pattern for light scattering [column 3, lines 36-39] and an illumination module [10] comprising light emitting elements [30] on a printed circuit board [column 4, line 38] and a reflecting layer [60]. A plurality of resistors [56, 57] is disposed on the surface of the printed circuit board opposite the reflecting surface [column 4, lines 43-45]. The reflecting layer [60] comprises copper [column 4, line 53].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the illumination module of Gianotti in the device of Kuwabara as there would be less loss of light because of the reflector surrounding the LEDs, thus making the backlight system brighter.

Claims 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuwabara et al. (6,508,564) in view of Gianotti et al. (6,481,131) and further in view of Yang (6,893,136).

Neither Kuwbara nor Gianotti disclose a prism sheet. Yang, in a similar device discloses both a diffusing sheet [140] and a prism sheet [130] located between the light guide panel [180] of a backlight device and an LCD panel [110]. This combination of elements is well known in the art and produces a desirable light output. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place a prism sheet in the device of Kuwabara as altered by the teaching of Gianotti to produce a desirable light output.

Allowable Subject Matter

Claims 1 and 4 are allowed.

Claims 6 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to show or suggest an illumination module or a backlight system used with an illuminating module comprising a printed circuit board comprising an array

of light emitting elements a reflecting layer on the surface having the light emitting elements arranged thereon, a reflecting layer and a plurality of resistors disposed under the reflecting layer.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to laura tso whose telephone number is 571-272-2385. The examiner can normally be reached on Tuesdays and Thursdays 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, sandra o'shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



laura tso
Primary Examiner
Art Unit 2875